

1.2 PURPOSE AND NEED FOR THE PROJECT AND ASSOCIATED FACILITIES

The purpose of the Wild Horse Wind Power Project is to construct and operate a new electrical generation resource using wind energy that will meet a portion of the projected growing regional demands for electricity. In the Pacific Northwest Electric Power Planning and Conservation Act, Congress established that development of renewable resources should be encouraged in the Pacific Northwest (16 USC § 839[1][B]). The Act defines wind power as a renewable resource (§ 839a[16]).

1.2.1 Need for Additional Power Generation Facilities

Recent national and regional forecasts predict increasing consumption of electrical energy will continue into the foreseeable future, requiring development of new generation resources to satisfy the increasing demand. The Energy Information Administration published a national forecast of electrical power through the year 2025. In it, the administration projected that total electricity demand would grow between 1.8 and 1.9% per year from 2001 through 2025. Rapid growth in electricity use for computers, office equipment, and a variety of electrical appliances in the residential and commercial sectors is only partially offset by improved efficiency in these electrical applications (U.S. Energy Information Administration 2003).

The Western Electricity Coordinating Council (WECC) forecasts electricity demand in the western United States. According to WECC's most recent coordination plan, the 2001-2011 summer peak demand requirement is predicted to increase at a compound rate of 2.5% per year (WECC 2002).

Based on data published by the Northwest Power and Conservation Council (NWPCC), electricity demand for the Council's four-state Pacific Northwest planning region (Washington, Oregon, Idaho, and Montana) was 20,080 average MW in 2000 (NWPCC 2003).

As shown in Table 1-1, the Council's recently revised 20-year demand forecast projects that electricity demand in the region will grow from 20,080 average MW in 2000 to 25,423 average MW by 2025 (medium forecast), an average annual growth rate of just less than 1% per year. While the Council's forecast indicates that the most likely range of demand growth (between the medium-low and medium-high forecasts) is between 0.4 and 1.50% per year, the low to high forecast range used by the Council recognizes that growth as low as -0.5% per year or as high as 2.4% per year is possible, although relatively unlikely (NWPCC 2003).

Table 1-1: Projected Pacific Northwest Electricity Demand, 2000-2025					
Forecast Scenario	Electricity Demand (Average Megawatts)			Growth Rates (% Change)	
	2000	2015	2025	2000-2015	2000-2025
Low	20,080	17,489	17,822	-0.92	-0.48
Medium	20,080	19,942	21,934	-0.05	0.35
Low					
Medium	20,080	22,105	25,423	0.64	0.95
Medium	20,080	24,200	29,138	1.25	1.50
High					
High	20,080	27,687	35,897	2.16	2.35

Source: NWPCC 2003

Generated power typically requires interconnection with a high-voltage electrical transmission system for delivery to purchasing retail utilities. The Applicant has submitted requests for transmission interconnection services for the Project to both Puget Sound Energy (PSE) and Bonneville Power Administration (BPA). The Project would connect to either the PSE or BPA transmission systems that run in close proximity to the Project site along of the following lines:

- Puget Sound Energy's Intermountain Power 115kV line, portions of which will be upgraded to 230 kV and intertie to Mid-C;
- Bonneville's Grand Coulee to Olympia 287-kV line;
- Bonneville's Columbia to Covington 230-kV line.

In summary, electrical consumers in the Northwest need increased power production to serve the predicted long-term increasing demand and high-voltage transmission lines to deliver the power.

1.2.2 Wind Power Project Purpose and Need

Washington and the Northwest region face a growing medium and long term demand for power. Many regional utilities are currently seeking to acquire new generating resources to meet their loads. More specifically, several regional utilities, including Avista, Puget Sound Energy (PSE), and PacifiCorp (doing business as Pacific Power in Washington) have all completed detailed studies and demand forecasts of their own systems as part of their Integrated Resource Plans (IRP) or Least Cost Plans (LCP) process with oversight from the WUTC (Washington Utilities and Transportation Commission). As a result of their formal IRP or LCP processes, PSE, PacifiCorp and Avista have issued Requests for Proposals (RFPs) specifically for wind power and/or other renewable resources. Avista is seeking to acquire 50 MW, PSE is seeking to acquire at least 150 MW and PacifiCorp

is seeking to acquire 500 MW. There is thus a regional demand for wind generated energy that greatly exceeds the existing regional supply.

The proposed Wild Horse Wind Power Project is intended to help meet this growing regional demand for renewable, wind-generated electricity.

1.2.3 Transmission Feeder Line Purpose and Need

In order to deliver the energy generated by the Project to customers, the Project must be interconnected with the high voltage transmission grid. The nearest existing transmission lines of the appropriate voltage for interconnecting a project of this size are the PSE 115kV Intermountain Power line to the south of the Project site and the BPA Schultz to Vantage 500 kV line west of the Project site. In order to interconnect with these existing transmission lines, it is necessary to construct new feeder lines between the Project site and these existing lines.